

J K S Baldwin

List of Publications by Year in descending order

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58
papers

2,981
citations

218677

26
h-index

161849

54
g-index

61
all docs

61
docs citations

61
times ranked

5002
citing authors

#	ARTICLE	IF	CITATIONS
1	Nitrogen-Doped Graphene-Rich Catalysts Derived from Heteroatom Polymers for Oxygen Reduction in Nonaqueous Lithium ⁺ Battery Cathodes. ACS Nano, 2012, 6, 9764-9776.	14.6	486
2	Outstanding radiation resistance of tungsten-based high-entropy alloys. Science Advances, 2019, 5, eaav2002.	10.3	360
3	Room-temperature single-photon generation from solitary dopants of carbon nanotubes. Nature Nanotechnology, 2015, 10, 671-675.	31.5	234
4	Ozonated Graphene Oxide Film as a Proton ⁺ Exchange Membrane. Angewandte Chemie - International Edition, 2014, 53, 3588-3593.	13.8	214
5	Determination of the Solid Electrolyte Interphase Structure Grown on a Silicon Electrode Using a Fluoroethylene Carbonate Additive. Scientific Reports, 2017, 7, 6326.	3.3	157
6	Heterogeneous to homogeneous melting transition visualized with ultrafast electron diffraction. Science, 2018, 360, 1451-1455.	12.6	133
7	Direct Determination of Solid-Electrolyte Interphase Thickness and Composition as a Function of State of Charge on a Silicon Anode. Journal of Physical Chemistry C, 2015, 119, 20339-20349.	3.1	127
8	Evaluating the solid electrolyte interphase formed on silicon electrodes: a comparison of ex situ X-ray photoelectron spectroscopy and in situ neutron reflectometry. Physical Chemistry Chemical Physics, 2016, 18, 13927-13940.	2.8	80
9	The role of grain size in He bubble formation: Implications for swelling resistance. Journal of Nuclear Materials, 2017, 484, 236-244.	2.7	70
10	Flow-based solution ⁻ liquid ⁻ solid nanowire synthesis. Nature Nanotechnology, 2013, 8, 660-666.	31.5	67
11	Microcompression study of Al-Nb nanoscale multilayers. Journal of Materials Research, 2012, 27, 592-598.	2.6	58
12	Rapid solidification growth mode transitions in Al-Si alloys by dynamic transmission electron microscopy. Acta Materialia, 2017, 131, 22-30.	7.9	58
13	Time-Resolved In Situ Measurements During Rapid Alloy Solidification: Experimental Insight for Additive Manufacturing. Jom, 2016, 68, 985-999.	1.9	53
14	Strong, Ductile, and Thermally Stable bcc-Mg Nanolaminates. Scientific Reports, 2017, 7, 8264.	3.3	53
15	Growth and structural characterization of epitaxial Cu/Nb multilayers. Thin Solid Films, 2011, 519, 4137-4143.	1.8	45
16	Room temperature deformation mechanisms of Mg/Nb nanolayered composites. Journal of Materials Research, 2018, 33, 1311-1332.	2.6	43
17	Self-organization of helium precipitates into elongated channels within metal nanolayers. Science Advances, 2017, 3, eaao2710.	10.3	41
18	Trapping of implanted He at Cu/Nb interfaces measured by neutron reflectometry. Applied Physics Letters, 2011, 98, .	3.3	40

#	ARTICLE	IF	CITATIONS
19	Smallest Metallic Nanorods Using Physical Vapor Deposition. <i>Physical Review Letters</i> , 2013, 110, 136102.	7.8	40
20	Radiation induced effects on mechanical properties of nanoporous gold foams. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	39
21	Mechanical properties of metal-ceramic nanolaminates: Effect of constraint and temperature. <i>Acta Materialia</i> , 2018, 142, 37-48.	7.9	39
22	Achieving Radiation Tolerance through Non-Equilibrium Grain Boundary Structures. <i>Scientific Reports</i> , 2017, 7, 12275.	3.3	38
23	Indentation Fracture Response of Al-TiN Nanolaminates. <i>Materials Research Letters</i> , 2013, 1, 102-108.	8.7	33
24	Design of radiation resistant metallic multilayers for advanced nuclear systems. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	33
25	Solid-State Approach for Fabrication of Photostable, Oxygen-Doped Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2015, 25, 6157-6164.	14.9	30
26	Controlled nanoporous Pt morphologies by varying deposition parameters. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	27
27	Evidence of a temperature transition for denuded zone formation in nanocrystalline Fe under He irradiation. <i>Materials Research Letters</i> , 2017, 5, 195-200.	8.7	27
28	What determines the interfacial configuration of Nb/Al ₂ O ₃ and Nb/MgO interface. <i>Scientific Reports</i> , 2016, 6, 33931.	3.3	25
29	Detection of helium bubble formation at fcc-bcc interfaces using neutron reflectometry. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	24
30	Investigating phosphonate monolayer stability on ALD oxide surfaces. <i>Applied Surface Science</i> , 2014, 288, 98-108.	6.1	22
31	Thermal flux limited electron Kapitza conductance in copper-niobium multilayers. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	21
32	Synthesis and characterization of nanoporous Pt-Ni alloys. <i>Applied Physics Letters</i> , 2009, 95, 201902.	3.3	20
33	Texture evolution in nanocrystalline iron films deposited using biased magnetron sputtering. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	19
34	Methylammonium Lead Tribromide Single Crystal Detectors towards Robust Gamma-Ray Photon Sensing. <i>Advanced Optical Materials</i> , 2020, 8, 2000233.	7.3	18
35	Anomaly of film porosity dependence on deposition rate. <i>Applied Physics Letters</i> , 2012, 100, 061601.	3.3	16
36	A study of the effect of iron island morphology and interface oxidation on the magnetic hysteresis of Fe-MgO (001) thin film composites. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	16

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37	Solitary Oxygen Dopant Emission from Carbon Nanotubes Modified by Dielectric Metasurfaces. ACS Nano, 2017, 11, 6431-6439.	14.6	15
38	In situ frustum indentation of nanoporous copper thin films. International Journal of Plasticity, 2017, 98, 139-155.	8.8	15
39	Microstructure and mechanical properties of co-sputtered Al-SiC composites. Materials and Design, 2019, 168, 107670.	7.0	13
40	Stress-induced surface instabilities and defects in thin films sputter deposited on compliant substrates. Soft Matter, 2017, 13, 4035-4046.	2.7	12
41	Comparison of void swelling of ferritic-martensitic and ferritic HT9 alloys after high-dose self-ion irradiation. Materials Characterization, 2021, 173, 110908.	4.4	11
42	Characterization of a Fe/Y2O3 metal/oxide interface using neutron and x-ray scattering. Applied Physics Letters, 2014, 105, 041601.	3.3	10
43	Reflectance determination of optical spectral emissivity of metal surfaces at ambient conditions. Journal of Applied Physics, 2018, 124, .	2.5	10
44	Structure and properties of pseudomorphically transformed bcc Mg in Mg/Nb multilayered nanolaminates studied using synchrotron X-ray diffraction. Journal of Applied Physics, 2019, 126, 025302.	2.5	10
45	Toward high-throughput defect density quantification: A comparison of techniques for irradiated samples. Ultramicroscopy, 2019, 206, 112820.	1.9	8
46	Quantification of void pinning effects during grain growth of nanocrystalline iron. Journal of Nuclear Materials, 2016, 481, 62-65.	2.7	7
47	The alleviation of radiation-damage on Nb/MgO film driven by strain gradient in He ion irradiation. Applied Surface Science, 2019, 465, 1014-1018.	6.1	7
48	Irradiation induced changes in small angle grain boundaries in mosaic Cu thin films. Applied Physics A: Materials Science and Processing, 2012, 108, 121-126.	2.3	6
49	Fluid and Resistive Tethered Lipid Membranes on Nanoporous Substrates. Journal of Physical Chemistry B, 2015, 119, 12868-12876.	2.6	6
50	Cr incorporated phase transformation in Y2O3 under ion irradiation. Scientific Reports, 2017, 7, 40148.	3.3	6
51	Implications of Microstructure in Helium-Implanted Nanocrystalline Metals. Materials, 2022, 15, 4092.	2.9	6
52	Multi-exciton emission from solitary dopant states of carbon nanotubes. Nanoscale, 2017, 9, 16143-16148.	5.6	5
53	Nanoscale morphologies at alloyed and irradiated metal-oxide bilayers. Journal of Materials Science, 2015, 50, 2726-2734.	3.7	4
54	Initial results and designs of dual-filter and plenoptic imaging for high-temperature plasmas. Review of Scientific Instruments, 2018, 89, 10E112.	1.3	4

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55	High-pressure and high-temperature neutron reflectometry cell for solid-fluid interface studies. European Physical Journal Plus, 2012, 127, 1.	2.6	3
56	Enhanced van der Waals epitaxy of germanium by out-of-plane dipole moment induced from transferred graphene on TiN/AlN multilayers. Journal of Applied Physics, 2021, 130, .	2.5	3
57	The Effect of Ballistic Electron Transport on Copper-Niobium Thermal Interface Conductance. , 2013, , .		0
58	Coupling Quantitative Dislocation Analysis with In Situ Loading Techniques: New Insight into Deformation Mechanisms. Microscopy and Microanalysis, 2017, 23, 764-765.	0.4	0